ABSTRACT OF THE DISCLOSURE

Reducing the number of hypotheses for locations of an active object in a saved image generated by a graphical user interface (GUI) of an application program may be accomplished by determining possible triangles for the saved image, wherein vertices

5   of the triangles are points where the active object and any two additional objects of the saved image are located, determining possible pairs of hypotheses corresponding to the two additional objects from a current playback image corresponding to the saved image, determining triangles corresponding to the possible pairs of hypotheses and filtering the detected triangles, determining vertices with weights for similar triangles

10   of the current playback image, and calculating a weight for every hypothesis of the active object and filtering hypotheses of the active object on the current playback image based on a weight bound.